

# **South Florida Water Management District Comments on the Everglades Restoration Transition Plan Draft Environmental Impact Statement**

**Governing Board Workshop  
April 13, 2011**

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# The Multi-Species Management Challenge

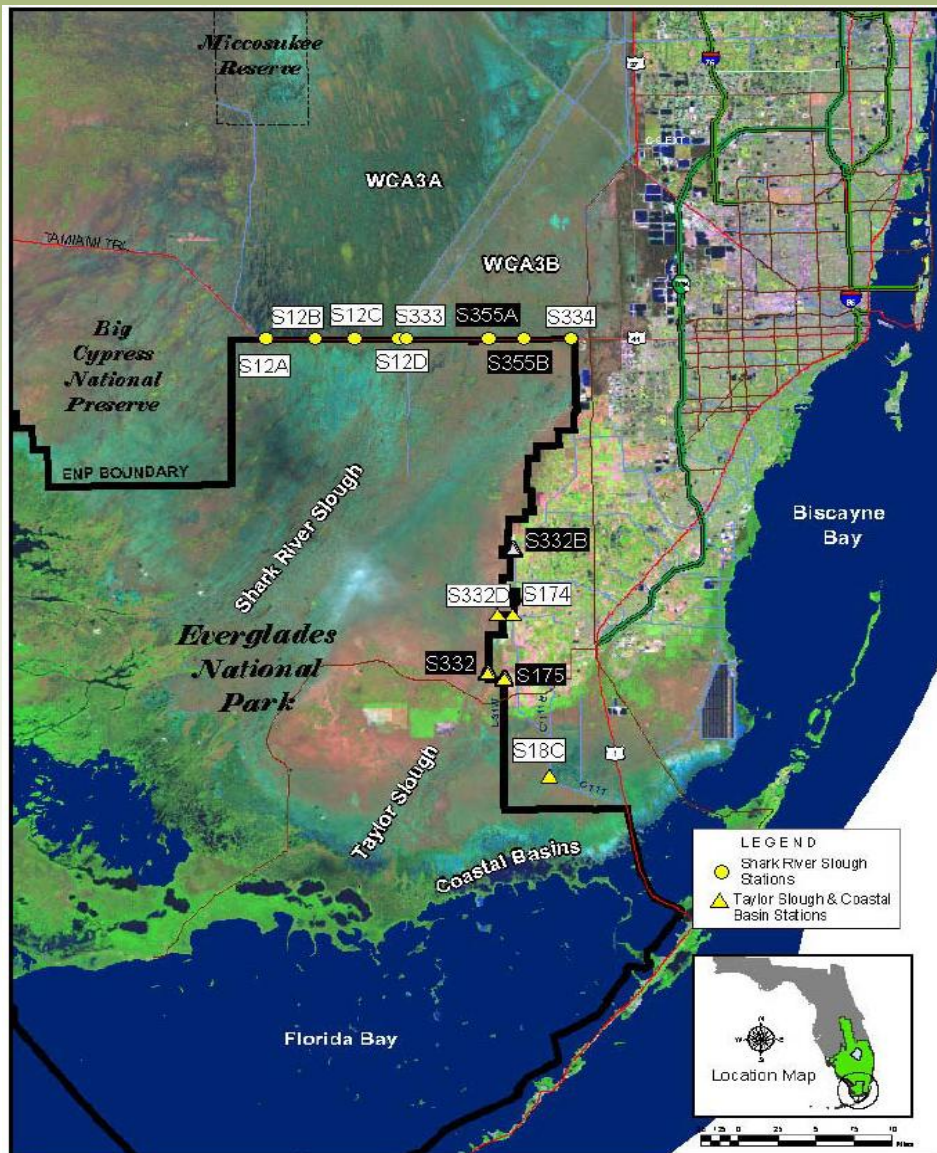
- Efforts to protect the Cape Sable Seaside Sparrow span a decade
- Broadening scope of species management to include the Everglade snail kite, wood stork and other wading bird species is important and consistent with a more system-wide approach
- SFWMD staff supports the efforts of U.S. Fish and Wildlife Service to apply solid science to create Multi-Species Transition Plan



## **SFWMD's Role in the Development of the ERTTP Tentatively Selected Plan**

- SFWMD participation was limited to preliminary technical input via Corps technical sub-teams
- SFWMD not included in efforts:
  - To characterize public health and safety issues
  - To develop and evaluate changes to the Water Conservation Area (WCA) -3A Regulation Schedule

# Key Areas of Concern



- Water Quality
- WCA-3A Ecology
- Water Supply
- Flood Protection/Operations

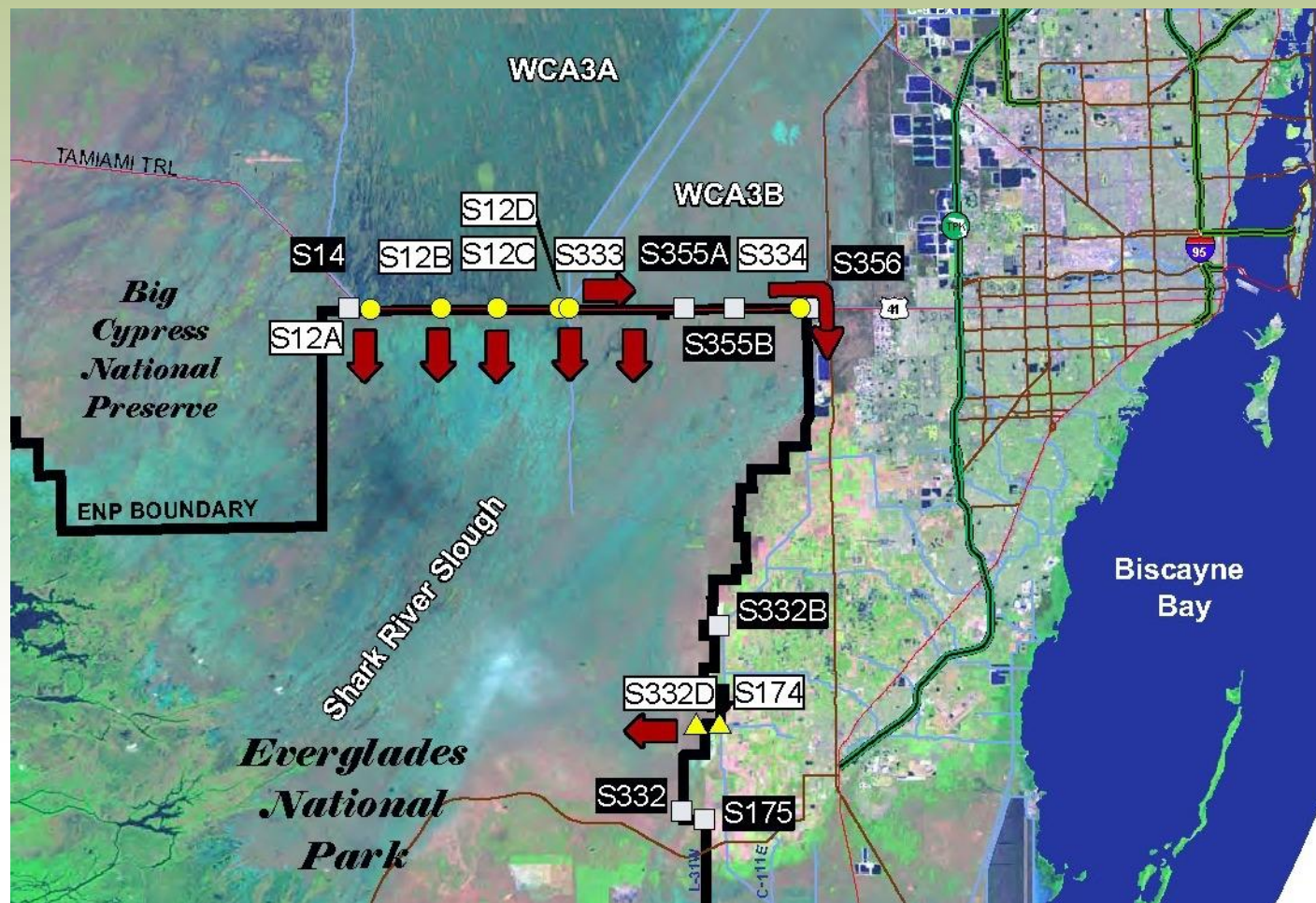
## Water Quality Issues

- The SFWMD supports moving more water into Shark River Slough
- The Draft Environmental Impact Statement (DEIS) does not adequately address the risk of impacts to water quality compliance
  - The SFWMD should not be held accountable for actions taken by the Federal government that cause a violation of the Long-term Limits in 1995 Settlement Agreement
  - An interagency approach for addressing the increased risk for future exceedances in Shark River Slough is needed
- Proposed changes in management of flows upstream of Shark River Slough are likely to adversely affect the ability to meet phosphorus limits of the Settlement Agreement



# Everglades National Park (ENP) Phosphorus Limit Reflects Total Flow

Five structures are monitored (S12A, B, C, D, and S333)  
for flow-weighted mean phosphorus of total flow



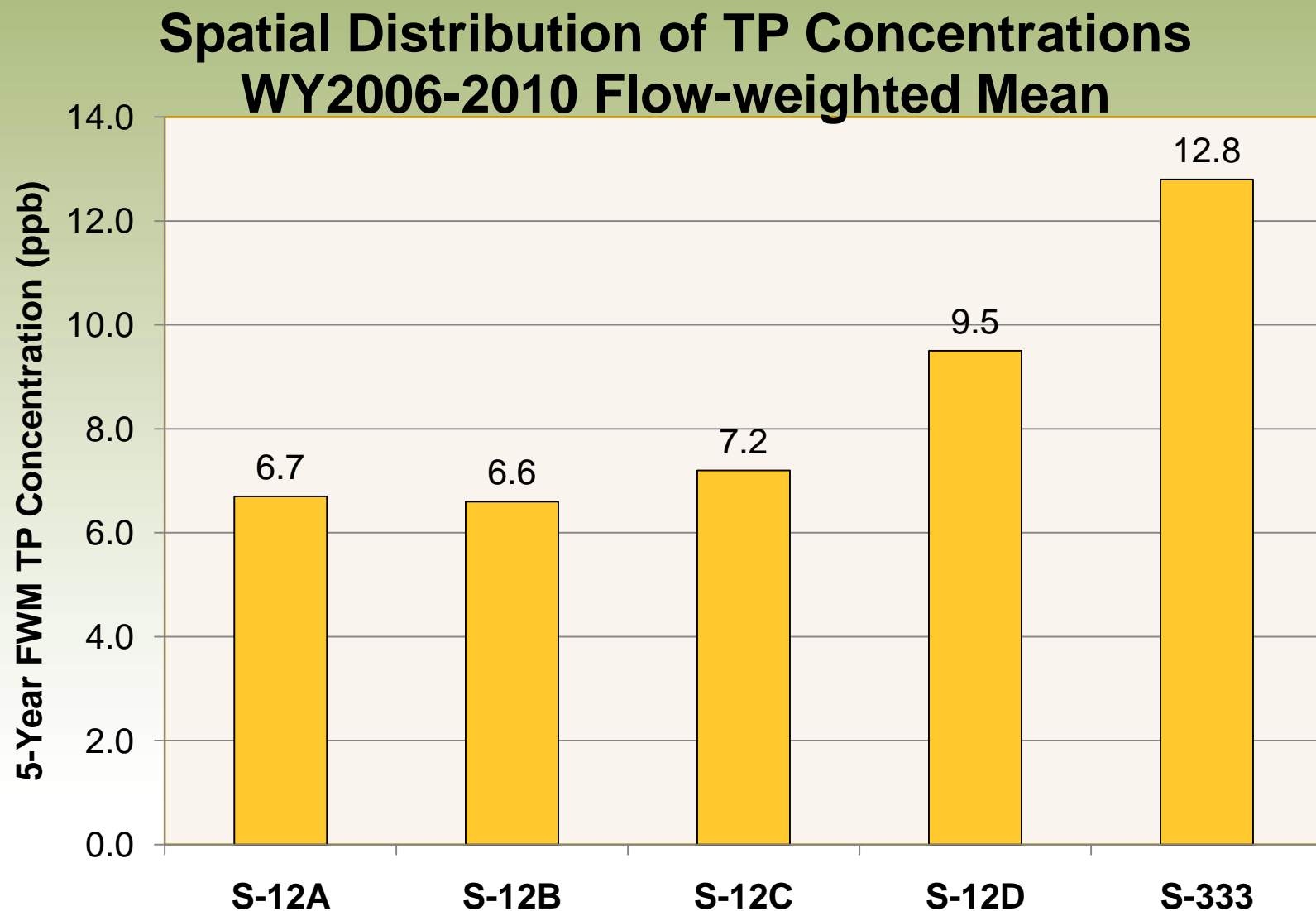
# Settlement Agreement Compliance With the Long-Term Limit

## For Everglades National Park / Shark River Slough

12-Month Period	Total Flow (kac-ft)	Flow-Weighted Mean TP Concentration (ppb)	Long-Term Limit (ppb) <i>Effective 12/31/2006</i>	Percent of Sampling Events Greater than 10 ppb
				Observed
*Oct 2007 - Sep 2008	562.0	10.6	10.2	73.7
Oct 2008 - Sep 2009	945.3	8.2	8.2	26.1
Oct 2009 - Sep 2010	809.8	8.9	8.9	50.0

**\*Revised March 2011 – Did not constitute a violation**

# Potential Impacts to Water Quality





# Factors Affecting Increase in Total Phosphorus

- Any change in seasonal distribution of flows can influence TP concentrations
- DEIS does not address range of uncertainties that can **increase** total phosphorus
  - Expanding areas of dry out and TP release upon rewetting
  - Changes in flow velocity or timing can alter water column concentrations
  - Stage levels and their fluctuations can influence concentrations in Shark River Slough

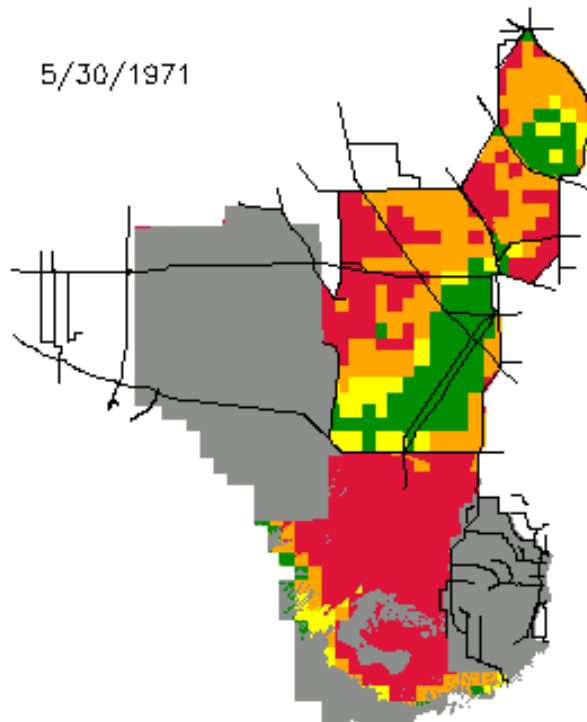
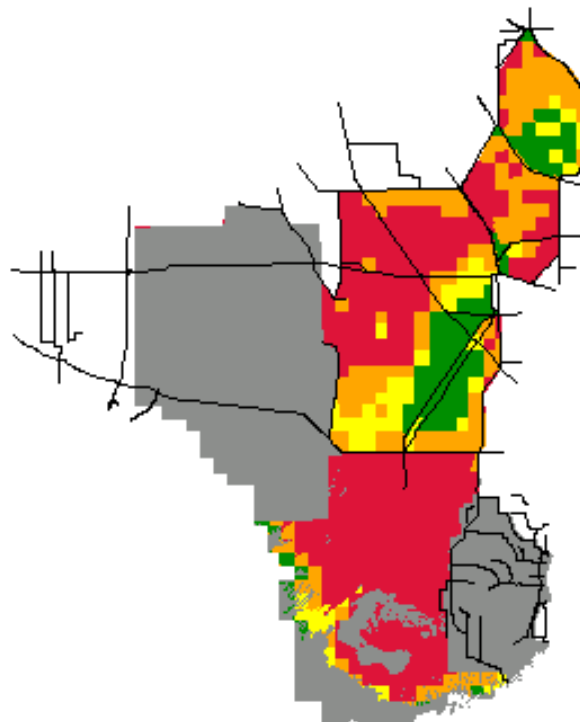
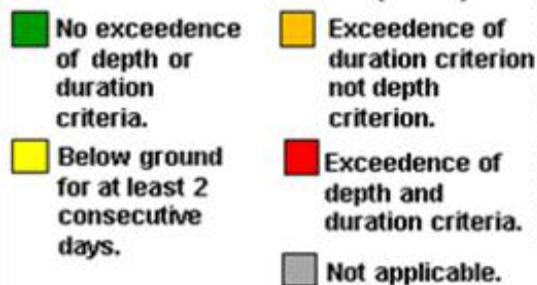
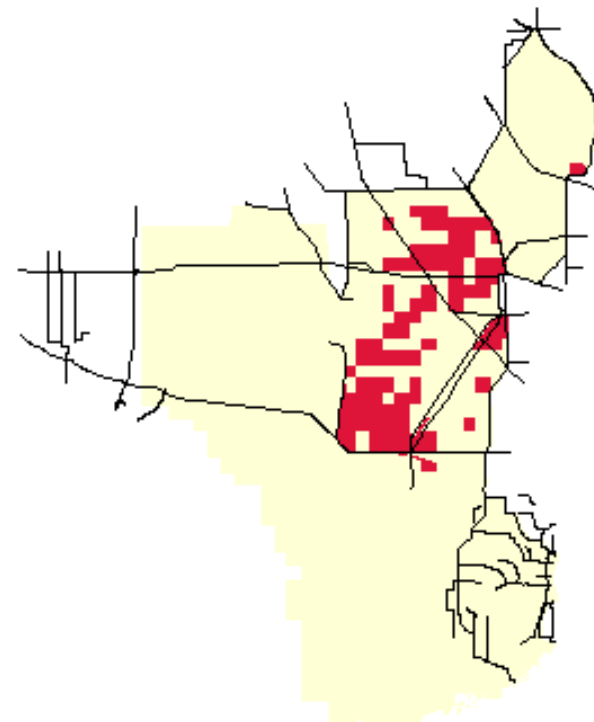
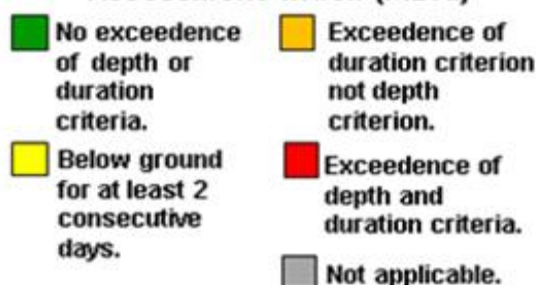
## WCA-3A Ecological Concerns

- Potential risks associated with lowering the WCA-3A regulation need further clarification
- Implications to wading bird colonies and foraging areas in northern WCA-3A are not fully discussed
- Potential for peat loss and muck fires in central and northern WCA-3A may be greater than depicted
- No soil or water quality assessments have been conducted to look at the impacts of lower water levels on water quality within WCA-3A
- Tree island recovery in southern WCA-3A could be offset by increasing stress to high quality Everglades landscapes in central WCA-3A
- CERP indicator regions and performance measures should have been considered when evaluating the impacts of lower water levels

# Ecological Impacts in WCA-3A

## MFL Exceedances for 1971: A Very Dry Year

5/30/1971

**Base Run (LORST3)**Minimum Depth  
Assessment Index (MDAI)**Comp Run (Run9E1)**Minimum Depth  
Assessment Index (MDAI)**MDAI Difference  
(LORST3 vs. Run9E1)**

# Public and Agricultural Water Supply Issues

- Managing WCA-3A at lower levels reduces storage available for consumptive use
- DEIS incorrectly assumes that Lake Okeechobee can deliver water during dry periods
  - Significant conveyance limitations and losses



# Public and Agriculture Water Supply Issues

- Insufficient information and analysis to determine impacts to public and agriculture water supply
  - Level of certainty
  - Water shortage duration, frequency and severity
- Periodic Scientists Calls need to include water supply experts when making release determinations





# Flood Protection and Operational Issues

- Health and public safety risk is not clearly defined
- The rationale for returning to a schedule used in the 1960s rather than a more progressive schedule is not clear
- Potential impacts and risks associated with proposed operational changes are not thoroughly analyzed and documented



# Flood Protection and Operational Issues

- Corps proposing to incorporate “Operational Flexibility” to address issues not modeled in the Draft EIS
  - Operational flexibility needs to be bounded by operating criteria that recognizes realities of operating a complex network of water management facilities
- Modeling underestimates flood impacts to the South Dade Conveyance System
- Development of Water Control Plan essential for SFWMD to assess overall impacts of ERTTP

## Next Steps in Review Process

- Comments to Corps on the DEIS are due April 18th
- SFWMD has responsibilities for determining Coastal Zone Management Act compliance with Chapter 373 Florida Statutes.
  - Insufficient information provided to determine whether ERTTP will impact water quality and Settlement Agreement compliance
  - Insufficient information to determine whether impacts to permitted water users and flood protection will occur

## Key Future Actions Needed

- Initiate a cooperative process for Settlement Agreement parties to resolve Shark River Slough water quality risk.
- Complete Water Control Plan and address water supply and flood protection risk prior to Final EIS and Record of Decision
- Active participation by SFWMD staff in the finalization of Water Control Plan for ERTTP as local sponsor of the C&SF Project

**Questions?**